

BOOK NOTICES

DOUGLAS J. FUTUYMA, H. BRADLEY SHAFFER, AND DANIEL SIMBERLOFF (EDS.). 2011. **Annual Review of Ecology, Evolution, and Systematics, Volume 42.** (ISSN 1543-592X; ISBN: 978-0-8243-1442-2, hbk.). Annual Reviews, Inc., 4139 El Camino Way, P.O. Box 10139, Palo Alto, California 94303-0139, U.S.A. (Orders: www.AnnualReviews.org, science@annualreviews.org, 800-523-8635, 650-493-4400). \$89.00 indiv., 526 pp., 7.25" × 9".

Contents of Volume 42:

1. Native Pollinators in Anthropogenic Habitats—*Rachael Winfree, Ignasi Bartomeus, and Daniel P. Cariveau*
2. Microbially Mediated Plant Functional Traits—*Maren L. Friesen, Stephanie S. Porter, Scott C. Stark, Eric J. von Wettberg, Joel L. Sachs, and Esperanza Martinez-Romero*
3. Evolution in the Genus *Homo*—*Bernard Wood and Jennifer Baker*
4. Ehrlich and Raven Revisited: Mechanisms Underlying Codiversification of Plants and Enemies—*Niklas Janz*
5. An Evolutionary Perspective on Self-Organized Division of Labor in Social Insects—*Ana Duarte, Franz J. Weissing, Ido Pen, and Laurent Keller*
6. Evolution of *Anopheles gambiae* in Relation to Humans and Malaria—*Bradley J. White, Frank H. Collins, and Nora J. Besansky*
7. Mechanisms of Plant Invasions of North American and European Grasslands—*T.R. Seastedt and Petr Pyšek*
8. Physiological Correlates of Geographic Range in Animals—*Francisco Bozinovic, Piero Calosi, and John I. Spicer*
9. Ecological Lessons from Free-Air CO₂ Enrichment (FACE) Experiments—*Richard J. Norby and Donald R. Zak*
10. Biogeography of the Indo-Australian Archipelago—*David J. Lohman, Mark de Bruyn, Timothy Page, Kristina von Rintelen, Robert Hall, Peter K.L. Ng, Hsi-Te Shih, Gary R. Carvalho, and Thomas von Rintelen*
11. Phylogenetic Insights on Evolutionary Novelty in Lizards and Snakes: Sex, Birth, Bodies, Niches, and Venom—*Jack W. Sites, Jr., Tod W. Reeder, and John J. Wiens*
12. The Patterns and Causes of Variation in Plant Nucleotide Substitution Rates—*Brandon Gaut, Liang Yang, Shohei Takuno, and Luis E. Eguiarte*
13. Long-Term Ecological Records and Their Relevance to Climate Change Predictions for a Warmer World—*K.J. Willis and G.M. MacDonald*
14. The Behavioral Ecology of Nutrient Foraging by Plants—*James F. Cahill Jr and Gordon G. McNickle*
15. Climate Relicts: Past, Present, Future—*Arndt Hampe and Alistair S. Jump*
16. Rapid Evolutionary Change and the Coexistence of Species—*Richard A. Lankau*
17. Developmental Patterns in Mesozoic Evolution of Mammal Ears—*Zhe-Xi Luo*
18. Integrated Land-Sea Conservation Planning: The Missing Links—*Jorge G. Álvarez-Romero, Robert L. Pressey, Natalie C. Ban, Ken Vance-Borland, Chuck Willer, Carissa Joy Klein, and Steven D. Gaines*
19. On the Use of Stable Isotopes in Trophic Ecology—*William J. Boecklen, Christopher T. Yarnes, Bethany A. Cook, and Avis C. James*
20. Phylogenetic Methods in Biogeography—*Fredrik Ronquist and Isabel Sanmartín*
21. Toward an Era of Restoration in Ecology: Successes, Failures, and Opportunities Ahead—*Katharine N. Suding*
22. Functional Ecology of Free-Living Nitrogen Fixation: A Contemporary Perspective—*Sasha C. Reed, Cory C. Cleveland, and Alan R. Townsend*

SABEEHA MERCHANT, WINSLOW R. BRIGGS, AND DONALD R. ORT. 2012. **Annual Review of Plant Biology, Volume 63.** (ISSN 1543-5008; ISBN: 978-0-8243-0663-2, hbk.). Annual Reviews, Inc., 4139 El Camino Way, P.O. Box 10139, Palo Alto, California 94303-0139, U.S.A. (**Orders:** www.AnnualReviews.org, science@annualreviews.org, 800-523-8635, 650-493-4400). \$94.00 indiv., 726 pp., 7.5" × 9".

Contents of Volume 63:

1. Native Pollinators in Anthropogenic Habitats—*Rachael Winfree, Ignasi Bartomeus, and Daniel P. Cariveau*
1. There Ought to Be an Equation for That—*Joseph A. Berry*
2. Photorespiration and the Evolution of C4 Photosynthesis—*Rowan F. Sage, Tammy L. Sage, and Ferit Kocacinar*
3. The Evolution of Flavin-Binding Photoreceptors: An Ancient Chromophore Serving Trendy Blue-Light Sensors—*Aba Losi and Wolfgang Gärtner*
4. The Shikimate Pathway and Aromatic Amino Acid Biosynthesis in Plants—*Hiroshi Maeda and Natalia Dudareva*
5. Regulation of Seed Germination and Seedling Growth by Chemical Signals from Burning Vegetation—*David C. Nelson, Gavin R. Flematti, Emilio L. Ghisalberti, Kingsley W. Dixon, and Steven M. Smith*
6. Iron Uptake, Translocation, and Regulation in Higher Plants—*Takanori Kobayashi and Naoko K. Nishizawa*
7. Plant Nitrogen Assimilation and Use Efficiency—*Guohua Xu, Xiaorong Fan, and Anthony J. Miller*
8. Vacuolar Transporters in Their Physiological Context—*Enrico Martinoia, Stefan Meyer, Alexis De Angeli, and Réka Nagy*
9. Autophagy: Pathways for Self-Eating in Plant Cells—*Yimo Liu and Diane C. Bassham*
10. Plasmodesmata Paradigm Shift: Regulation from Without Versus Within—*Tessa M. Burch-Smith and Patricia C. Zambryski*
11. Small Molecules Present Large Opportunities in Plant Biology—*Glenn R. Hicks and Natasha V. Raikhel*
12. Genome-Enabled Insights into Legume Biology—*Nevin D. Young and Arvind K. Bharti*
13. Synthetic Chromosome Platforms in Plants—*Robert T. Gaeta, Rick E. Masonbrink, Lakshminarasimhan Krishnaswamy, Changzeng Zhao, and James A. Birchler*
14. Epigenetic Mechanisms Underlying Genomic Imprinting in Plants—*Claudia Köhler, Philip Wolff, and Charles Spillane*
15. Cytokinin Signaling Networks—*Ildoo Hwang, Jen Sheen, and Bruno Müller*
16. Growth Control and Cell Wall Signaling in Plants—*Sebastian Wolf, Kian Hématy, and Herman Höfte*
17. Phosphoinositide Signaling—*Wendy F. Boss and Yang Ju Im*
18. Plant Defense Against Herbivores: Chemical Aspects—*Axel Mithöfer and Wilhelm Boland*
19. Plant Innate Immunity: Perception of Conserved Microbial Signatures—*Benjamin Schwessinger and Pamela C. Ronald*
20. Early Embryogenesis in Flowering Plants: Setting Up the Basic Body Pattern—*Steffen Lau, Daniel Slane, Ole Herud, Jixiang Kong, and Gerd Jürgens*
21. Seed Germination and Vigor—*Loïc Rajjou, Manuel Duval, Karine Gallardo, Julie Catusse, Julia Bally, Claudette Job, and Dominique Job*
22. A New Development: Evolving Concepts in Leaf Ontogeny—*Brad T. Townsley and Neelima R. Sinha*
23. Control of *Arabidopsis* Root Development—*Jalean J. Petricka, Cara M. Winter, and Philip N. Benfey*
24. Mechanisms of Stomatal Development—*Lynn Jo Pillitteri and Keiko U. Torii*
25. Plant Stem Cell Niches—*Ernst Aichinger, Noortje Kornet, Thomas Friedrich, and Thomas Laux*
26. The Effects of Tropospheric Ozone on Net Primary Productivity and Implications for Climate Change—*Elizabeth A. Ainsworth, Craig R. Yendrek, Stephen Sitch, William J. Collins, and Lisa D. Emberson*
27. Quantitative Imaging with Fluorescent Biosensors—*Sakiko Okumoto, Alexander Jones, and Wolf B. Frommer*